

Notes - Calculating Speed, Distance + Time 4th

$$\text{Speed} = \frac{\Delta \text{distance}}{\Delta \text{time}}$$

Hints:

1. Label the d, t, and s in problem
2. Pay attention to units

Ex 1: It takes me 3 hours to travel the 185 miles to Bluffton, IN. What is my average driving speed?

$$S = \frac{185 \text{ miles}}{3 \text{ hrs}} = 61.\bar{6} \text{ mi/hr}$$

Ex 2: The train traveled 85 miles per hour for 2 hours. How far did it go?

$$2 \cdot 85 = \frac{d}{2} \cdot 2$$

$$d = 170 \text{ miles}$$

$$t \cdot s = \frac{d}{t} \cdot t$$

$$t \cdot s = d$$

$$2 \cdot 85 = 170 \text{ miles}$$

Ex 3: My friend's house is 8 miles away. I can travel there at an average speed of 25 miles per hour. How long will it take me to get there?

$$t \cdot 25 = \frac{8}{t} \cdot t$$

$$\frac{25t}{25} = \frac{8}{25}$$

$$t = \frac{d}{s}$$

$$t = \frac{8}{25} = 0.32$$

$$t = 0.32 \text{ hours} \times \frac{60 \text{ min}}{1 \text{ hr}} \approx 19 \text{ minutes}$$